

CATALOG DOCUMENTATION  
NATIONAL COASTAL ASSESSMENT- NORTHEAST DATABASE  
YEAR 20010 STATIONS  
SAMPLING EVENT DATA: "EVENTS"

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1. DATASET IDENTIFICATION

1.1 Title of Catalog document

National Coastal Assessment-Northeast Region Database  
Year 2000 Stations  
Sampling Event Data

1.2 Authors of the Catalog entry

John Kiddon, U.S. EPA NHEERL-AED  
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1.3 Catalog revision date

December 29, 2003

1.4 Dataset name

EVENTS

1.5 Task Group

National Coastal Assessment-Northeast

1.6 Dataset identification code

002

1.7 Version

001

1.8 Request for Acknowledgment

EMAP requests that all individuals who download EMAP data acknowledge the source of these data in any reports, papers, or presentations. If you publish these data, please include a statement similar to: "Some or all of the data described in this article were produced by the U. S. Environmental

Protection Agency through its Environmental Monitoring and Assessment Program (EMAP)".

## 2. INVESTIGATOR INFORMATION (for full addresses see Section 13)

### 2.1 Principal Investigators

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### 2.2 Sample Collection Investigators

Donald Cobb, U.S. EPA NHEERL-AED

### 2.3 Sample Processing Investigators

Not Applicable

## 3. DATASET ABSTRACT

### 3.1 Abstract of the Dataset

The EVENTS data file reports information about the sampling events conducted in the 2000 National Coastal Assessment (Northeast component). Reported here is information regarding the sampling event, including: sampling date; water depth at station; actual station location (planned locations are reported in the STATIONS data file); and presence or absence of submerged aquatic vegetation (SAV) or macroalgae. One record is presented per sampling event.

### 3.2 Keywords for the Dataset

Latitude, longitude, station water depth, sampling date, SAV, macroalgae

## 4. OBJECTIVES AND INTRODUCTION

### 4.1 Program Objective

The National Coastal Assessment (NCA) is a national monitoring and assessment program with the primary goal of providing a consistent evaluation of the estuarine condition in U.S. estuaries. It is an initiative of the Environmental Monitoring and Assessment Program (EMAP), and is a partnership of several federal and state environmental agencies, including: EPA's Regions, Office of Research and Development, and Office of Water; state environmental protection agencies in the 24 marine coastal states and Puerto Rico; and the United States Geological Survey (USGS) and the National Oceanic and Atmospheric Agency (NOAA). The five-year NCA program was initiated in 2000, and is also known as the Coastal 2000 Program.

Stations were randomly selected using EMAP's probabilistic sampling framework and were sampled once during a summer index period (June to October). A consistent suite of indicators was used to measure conditions in the water, sediment, and in benthic and fish communities. The measured data may be used by the states to meet their reporting requirements under

the Clean Water Act, Section 305(b). The data will also be used to generate a series of national reports characterizing the condition of the Nation's estuaries.

#### 4.2 Dataset Objective

This dataset reports information regarding the sampling event. Only data from the Northeastern U.S. states (Maine through Delaware) are reported here.

#### 4.3 Dataset Background Discussion

A two-year sampling design was employed for 2000-2001 NCA program in the Northeast. Analysts may therefore wish to consider the two years of data together.

This database contains data collected in 2000 from the Northeast component of the NCA, measured in the estuaries of the states Maine through Delaware. Nine federal-state cooperative agreements were formed to administer the NCA program in Northeast U.S. (designated by the parameter ST\_COOP, which reported in the STATIONS data file).

The EVENTS data file contains the actual sampling date, latitude, and longitude. These entries may differ slightly from that initially planned by the NCA managers. Information regarding planned locations is reported in the STATIONS data file. The presence or absence of SAV or macroalgae is determined by visual observation at the time of sampling.

NCA planners provide two alternate locations for a station location in the event that the original location cannot be sampled. The parameter STA\_ALT indicates whether the station location was the original site, first alternate, or second alternate—STA\_ALT = "A", "B", or "C", respectively. Also refer to discussion in the STATIONS metadata file regarding use of this parameter during analysis of the data.

If it were not possible to sample within 0.05 nautical mile of the planned location (e.g., due to inadequate depth, safety concerns), the sampling site was relocated at random to the nearest acceptable location or was classified as 'not sampled'. Sampling operations were then performed at the alternate planned location as noted in the discussion regarding the parameter STA\_ALT above.

Some stations were visited more than once in 2000, as is indicated by the parameter VIS\_NUM = 2 or 3. Users may wish to disregard results from return visits to avoid "double counting."

#### 4.4 Summary of Dataset Parameters

\* denotes parameters that should be used as key fields when merging data files

*STATION	Station Identifier
*STAT_ALT	Station Location (A, B or C)
*EVNTDATE	Event Date
VISNUM	Number of Visit to this Station
STADEPTH	Depth of Water at Station (m)
EVNT_LAT	Event Latitude (decimal degrees, datum NAD83)
EVNT_LNG	Event Longitude (decimal degrees, datum NAD83)
SAV	Submerged Aquatic Vegetation visible
MACROALG	Macro-Algae present at Station

## 5. DATA ACQUISITION AND PROCESSING METHODS

### 5.1 Data Acquisition / Field Sampling

#### 5.1.1 Sampling Objective

Record the date, location, water depth, and visit number of sampling events in estuaries of the Northeastern U.S. states during the 2000 NCA program.

#### 5.1.2 Sample Collection: Methods Summary

A Differential GPS or a Loran system was used to measure station latitude and longitude. Station depth was measured with an electronic depth finder. These measurements were performed at the beginning of a sampling event. Presence of submerged aquatic vegetation and macro-algae and was determined by visual inspection.

#### 5.1.3 Beginning Sampling Dates

7 July 2000

#### 5.1.4 Ending Sampling Dates

20 October 2000

#### 5.1.5 Sampling Platform

Samples were collected from gasoline or diesel powered boats 18 to 133 feet in length.

#### 5.1.6 Sampling Equipment

The navigation system consists of two components: a Northstar Loran receiver and a Leica MX400 Differential GPS receiver.

#### 5.1.7 Manufacturer of Sampling Equipment

LORAN: Northstar

GPS: Raytheon

#### 5.1.8 Key Variables

Not applicable

#### 5.1.9 Sampling Collection: Calibration

Not applicable

#### 5.1.10 Sample Collection: Quality Control

The station latitude and longitude values were referenced to the datum NAD83". If it were not possible to sample within 0.05 nautical mile of the planned location (e.g., due to inadequate depth, safety concerns), the sampling site was relocated at random to the nearest acceptable location or was classified as 'not sampled', and sampling was performed at the alternate planned location (see Section 4.4). Recorded and nominal latitudes and longitude values were compared at the conclusion of the field season.

#### 5.1.11 Sample Collection: References

Strobel, C.J. 2000. Coastal 2000-Northeast Component: Field Operations Manual U. S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, Narragansett, RI. EPA/620/R-00/002.

#### 5.1.12 Sample Collection: Alternate Methods

For ST\_COOP=CT (Connecticut, Long Island Sound) and CT-FSH (Connecticut, LIS Fish Survey): No Macro-algae or SAV observations were recorded. Consult the STATIONS dataset for ST\_COOP information.

### 5.2 Data Preparation and Sample Processing

No analytical processing was involved with the EVENTS parameters

## 6. DATA ANALYSIS AND MANIPULATIONS

### 6.1 Name of New or Modified Values

Not applicable

### 6.2 Description of Data Manipulation

Not applicable

## 7. DATA DESCRIPTION

### 7.1 Description of Parameters

#### 7.1.1 Components of the Dataset

Name	Type	Length	Label
STATION	Char	9	Station Identifier
EVNTDATE	mmddyyyy	8	Event Date
STAT_ALT	Char	1	Station Location (A,B or C)
VISNUM	Num	8	Number of Visit to this Station
STADEPTH	Num	8	Depth of Water at Station (m)
EVNT_LAT	Num	8	Event Latitude-Decimal Degrees
EVNT_LNG	Num	8	Event Longitude-Decimal Degrees
SAV	Char	1	Submerged Aquatic Vegetation visible
MACROALG	Char	1	Macro-Algae present at Station

#### 7.1.2 Precision of Reported Values

EVNT\_LAT and EVNT\_LNG are reported to 0.0001 decimal degree units.

#### 7.1.3 Minimum Value in Dataset

EVNTDATE	7/7/00
VISNUM	1
STADEPTH	0.1
EVNT_LAT	38.4521
EVNT_LNG	-75.7737

#### 7.1.4 Maximum Value in Dataset

EVNTDATE	10/20/00
VISNUM	3
STADEPTH	51.0
EVNT_LAT	44.9456
EVNT_LNG	-67.0939

### 7.2 Data Record Example

#### 7.2.1 Column Names for Example Records

STATION	EVNTDATE	STAT_ALT	VISNUM	STADEPTH	EVNT_LAT	EVNT_LNG	SAV	MACROALG
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### 7.2.2 Example Data Records

STATION	STAT_ALT	EVNTDATE	VISNUM	STADEPTH	EVNT_LAT	EVNT_LNG	SAV	MACROALG
CT00-0001	A	8/17/00	1	1.8	41.1510	-73.2198		
CT00-0003	A	8/4/00	1	8	41.2877	-73.0702		
CT00-0005	A	9/18/00	1	1.5	41.2732	-72.3333		

## 8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude (Westernmost)  
-75.7737 decimal degrees

8.2 Maximum Longitude (Easternmost)  
-67.0939 decimal degrees

8.3 Minimum Latitude (Southernmost)  
38.4521 decimal degrees

8.4 Maximum Latitude (Northernmost)  
44.9456 decimal degrees

8.5 Name of area or region

The National Coastal Assessment Northeast Region covers the northeastern US coastline from Maine to Delaware.

## 9. QUALITY CONTROL AND QUALITY ASSURANCE

9.1 Measurement Quality Objectives

Provide accurate information regarding the location of sampling events

9.2 Data Quality Assurance Procedures

All measurements were performed in the field. See Section 5.1.10 for sampling QA/QC procedures.

9.3 Actual Measurement Quality

Not applicable

## 10. DATA ACCESS

10.1 Data Access Procedures

Data can be downloaded from the web

<http://www.epa.gov/emap/nca/html/regions/index.html>

10.2 Data Access Restrictions

None

### 10.3 Data Access Contact Persons

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### 10.4 Dataset Format

ASCII (CSV) and SAS Export files

### 10.5 Information Concerning Anonymous FTP

Not available

### 10.6 Information Concerning WWW

No gopher access, see Section 10.1 for WWW access

### 10.7 EMAP CD-ROM Containing the Dataset

Data not available on CD-ROM

## 11. REFERENCES

Strobel, C.J. 2000. Environmental Monitoring and Assessment Program: Coastal 2000 - Northeast component: field operations manual. Narragansett (RI): U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division. EPA/620/R-00/002. 68 p.

U.S. EPA. 2001. National Coastal Assessment: Field Operations Manual. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA/620/R-01/003. 72 p.

U.S. EPA. 2001. Environmental Monitoring and Assessment Program (EMAP): National Coastal Assessment Quality Assurance Project Plan 2001-2004. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA/620/R-01/002. 189 p.

## 12. TABLE OF ACRONYMS

AED	Atlantic Ecology Division
CSC	Computer Sciences Corporation
EMAP	Environmental Monitoring and Assessment Program
EPA	Environmental Protection Agency
NCA	National Coastal Assessment
NHEERL	National Health and Environmental Effects Research Laboratory
QA/QC	Quality Assurance/Quality Control
WWW	World Wide Web

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